

03050201-020

(*Wadboo Swamp*)

General Description

Watershed 03050201-020 is located in Berkeley County and consists primarily of *Wadboo Swamp* and its tributaries. The watershed occupies 80,967 acres of the Lower Coastal Plain region of South Carolina. The predominant soil types consist of an association of the Bladen-Wahee-Hobcaw-Mouzon-Chipley series. The erodibility of the soil (K) averages 0.17; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 72.3% forested land, 11.8% forested wetland, 8.8% scrub/shrub land, 5.9% agricultural land, 0.8% barren land, 0.3% water, and 0.1% urban land.

Wadboo Swamp originates near the Town of St. Stephen and merges with the Tail Race Canal to form the Cooper River. Gravel Hill Swamp accepts the drainage of Walker Swamp (Halfway Swamp) then flows into Wadboo Swamp followed by Rice Hope Swamp, Stewart Creek, Whiskinboo Creek (Cane Pond Branch), Cane Gully Branch (Graveyard Lead, Peters Swamp, Callum Branch), Bullhead Run (Mary Anne Branch), and Broad Ax Branch (Canady Branch, Mingo Branch). Wadboo Swamp becomes Wadboo Creek downstream of Broad Ax Branch. Walleye Bay, located at the headwaters of Whiskinboo Creek and Cane Gully Branch accepts drainage from Big Ocean Bay, Whitten Bay, and Boggy Swamp. Little Ocean Bay, Graveyard Bay, Huckleberry Bay, and Mill Bay drain into Peters Swamp. There are a total of 172.3 stream miles in this watershed, all classified FW. Another natural resource is the Francis Marion National Forest, which extends across the entire watershed.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
ST-007	S	FW	WALKER SWAMP AT US 52 2.5 MI S ST STEPHENS
CSTL-113	W	FW	WADBOO CREEK AT SC 402

Wadboo Creek (CSTL-113) - Aquatic life uses are fully supported. This is a blackwater system, characterized by naturally low dissolved oxygen concentrations. Although dissolved oxygen excursions occurred, they were typical of values seen in blackwater systems and were considered natural, not standards violations. Recreational uses are not supported due to fecal coliform bacteria excursions.

Walker Swamp (ST-007) - Aquatic life uses are fully supported; however there is a significant increasing trend in turbidity. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Phenols were detected in the water column in 1995. Recreational uses are not supported due to fecal coliform bacteria excursions; however a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

A fish consumption advisory has been issued by the Department for mercury and includes Wadboo Creek within this watershed (see advisory p.62).

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT</i>	<i>NPDES# TYPE LIMITATION</i>
HALFWAY SWAMP GA PACIFIC/RUSSELLVILLE PIPE #: 001 FLOW: 0.905 PIPE #: 001A,001B,002 FLOW: M/R * MAPPED IN 03050112-020)	*SCG250179 MINOR INDUSTRIAL EFFLUENT
WADBOO SWAMP MACEDONIA ELEM & HIGH SCHOOL PIPE #: 001 FLOW: 0.0298 WQL FOR BOD ₅ , TRC, NH ₃ -N, DO	SC0027090 MINOR DOMESTIC WATER QUALITY

Nonpoint Source Management Program

Mining Activities

<i>MINING COMPANY MINE NAME</i>	<i>PERMIT # MINERAL</i>
WARE BROTHERS, INC. FONDREN EARTH EXCAVATION	0817-15 SAND/GRAVEL

Growth Potential

There is a low potential for growth in this watershed, which contains the Town of Bonneau and portions of the communities of Macedonia and Russellville. A large portion of the watershed is contained within the Francis Marion National Forest.